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10/597,590	07/31/2006	Ira Sanders	LIN-001	3452	
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BOSTON, MA	A 02110		ART UNIT	PAPER NUMBER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.	Applicant(s)	-
10/597,590	SANDERS, IRA	
Examiner	Art Unit	_
VICTORIA HICKS	3772	

	VICTORIA HICKS	3//2						
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA Exercision of time may be available under the provisions of 37 OFR 1:3 after SIX (f) MCNT15 from the mailing date of this communication. **Fallur to ready within the act of extended period for reply will, by statute. Any reply received by the Office later than three months after the mailing-aeried plant term adjustment. See 37 CFR 1:70(b).	TE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be tin Ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this or D (35 U.S.C. § 133).						
Status								
1) Responsive to communication(s) filed on 13 Se 2a) This action is FINAL. 2b) This a: 3) Since this application is in condition for allowan closed in accordance with the practice under E:	action is non-final. ce except for formal matters, pro		merits is					
Disposition of Claims								
4 ☐ Claim(s) 19-83 is/are pending in the application 4a) Of the above claim(s) 19-31.41-47.58-65 an 5) ☐ Claim(s)	<u>d 70-73</u> is/are withdrawn from c jected.	onsideration.						
Application Papers								
9) ☐ The specification is objected to by the Examiner 10) ☑ The drawing(s) filed on ∑31/06 is/are: a) ☑ acc Applicant may not request that any objection to the d Replacement drawing sheet(s) including the correction 11) ☐ The oath or declaration is objected to by the Examination	epted or b) objected to by the lrawing(s) be held in abeyance. See on is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CF						
Priority under 35 U.S.C. § 119								
12) Acknowledgment is made of a claim for foreign a⟩ All b⟩ Some * c⟩ None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priori application from the International Bureau * See the attached detailed Office action for a list of	have been received. have been received in Applicative documents have been received (PCT Rule 17.2(a)).	on No ed in this National	Stage					
Attachment(s)								

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO/SB/08)

Paper No(s)/Mail Date 3/24/11.

4) Interview Summary (PTO-413) Paper No(s)/Mail Date. ____.

5) Notice of Informal Patent Application

6) Other: __

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DETAILED ACTION

This action is in response to the Request for Continued Examination (RCE) filed on 9/13/10. Currently, claims 19-83 are pending in the application. Claims 19-31, 41-47, 58-65, and 70-73 have been withdrawn by Applicant, claims 1-18 have been cancelled by Applicant and new claims 76-83 were added by Applicant.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/13/10 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 69 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 69 recites the limitation "the counterforce pressure" in line 1 of the claim. There is insufficient antecedent basis for this limitation in the claim.

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3. Claim 69 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 69 recites that "the counterforce pressure prevents the external surface from falling toward the soft tissue." It is unclear to the examiner how the external surface can fall toward the soft tissue, since the external service has been disclosed to be on the soft tissue (in claim 68, on which claim 69 is dependent).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

- 4. Claims 40 and 57 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 40 and 57 recite "a connection to at least one of the patient's pharynx, the patient's oral cavity, the patient's tooth, a dental device, and a mount exterior to the patient's mouth." Given this recitation, it appears that Applicant is attempting to claim the patient's pharynx, the patient's oral cavity, the patient's tooth and the patient's mouth, which are non-statutory subject matter.
- 5. Claims 66, 80 and 81 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 66 recites that "the anchor member prevents at least a portion of the tongue from collapsing." Given this recitation, it appears that Applicant is attempting to claim

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the patient's tongue, which is non-statutory subject matter. Claims 80 and 81 are dependent upon claim 66 and therefore, include the same error.

6. Claims 74 and 75 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 74 recites "each of the first end and the second end contacting solely soft tissue." Given this recitation, it appears that Applicant is attempting to claim the soft tissue, which is non-statutory subject matter. Claim 75 depends upon claim 74 and therefore, includes the same error.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filled in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filled in the United States before the invention by the applicant for patent, except that an international application filled under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filled in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

 Claims 32-34, 40, 48-52, 55, 57, 66, 68, 69, 74 and 75 are rejected under 35 U.S.C. 102(e) as being anticipated by Schweich, Jr. et al. (US 5,961,440).

In regards to claim 32, Schweich, Jr. et al. teaches in Figure 1, the abstract and column 2, lines 56-59 a shaft (18) sized for insertion into a soft tissue located in a patient's oral cavity or pharynx; a retractor member (20) connected at or near a first end of the shaft (18); and an anchor member (20) connected at or near a second end of the

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shaft (18), wherein at least one of the retractor member (20) or the anchor member (20) is configured to be positioned on an external surface of the soft tissue, neither the retractor member (20) nor the anchor member (20) configured to be tethered to bone, and at least one of the shaft (18), the retractor member (20) and the anchor member (20) interact to exert a pressure that prevents the deformation of the external surface of the soft tissue.

In regards to claim 33, Schweich, Jr. et al. teaches the apparatus of claim 32. Schweich, Jr. et al. teaches in Figure 1, the abstract and column 2, lines 56-59 that the pressure can stiffen the soft tissue (by exerting pressure on the soft tissue to secure it in place) to prevent deformation of the external surface, the pressure is a counterforce pressure that prevents deformation of the external surface, the pressure is a counterforce pressure that creates an indentation in the external surface, or at least one of the retractor member (20), the shaft (18), and the anchor member (20) adjust to alter the pressure exerted on the soft tissue.

In regards to claim 34, Schweich, Jr. et al. teaches the apparatus of claim 32. Schweich, Jr. et al. teaches in column 7, lines 31-33 that the shaft (tension member 18) is flexible.

In regards to claim 40, Schweich, Jr. et al. teaches the apparatus of claim 32. Schweich, Jr. et al. teaches in Figure 1 a connection to at least one of the patient's pharynx, the patient's oral cavity, the patient's tooth, a dental device, and a mount (14) exterior to the patient's mouth.

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In regards to claim 48, Schweich, Jr. et al. teaches in Figure 1, the abstract and column 2, lines 56-59 a shaft (18) sized for insertion into a patient's tongue; a retractor member (20) connected at or near a first end of the shaft (18); and an anchor member (20) connected at or near a second end of the shaft (18), wherein at least one of the retractor member (20) or the anchor member (20) is configured to be positioned on an external surface of the tongue, neither the retractor member (20) nor the anchor member configured to be tethered to bone, and at least one of the shaft (18), the retractor member (20) and the anchor member (20) interact to exert a pressure that prevents the external surface from falling toward a soft tissue located in the patient's oral cavity or pharynx.

In regards to claim 49, Schweich, Jr. et al. teaches the apparatus of claim 48. Schweich, Jr. et al. teaches in Figure 1 that the shaft (18) is sized for insertion through the patient's tongue.

In regards to claim 50, Schweich, Jr. et al. teaches the apparatus of claim 48. Schweich, Jr. et al. teaches in Figure 1, the abstract and column 2, lines 56-59 that the pressure can stiffen the soft tissue (by exerting pressure on the soft tissue to secure it in place) to prevent deformation of the external surface, the pressure is a counterforce pressure that prevents deformation of the external surface, the pressure is a counterforce pressure that creates an indentation in the external surface, or at least one of the retractor member (20), the shaft (18), and the anchor member (20) adjust to alter the pressure exerted on the soft tissue.

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In regards to claim 51, Schweich, Jr. et al. teaches the apparatus of claim 48. Schweich, Jr. et al. teaches in column 7, lines 28-30 that the tissue retractor is formed from one of more biocompatible materials.

In regards to claim 52, Schweich, Jr. et al. teaches the apparatus of claim 48.

Schweich, Jr. et al. teaches in column 7, lines 31-33 that the shaft (tension member 18) is flexible.

In regards to claim 55, Schweich, Jr. et al. teaches the apparatus of claim 48. Schweich, Jr. et al. teaches in Figure 1 an apparatus in which the external surface can be the centerline of the tongue curve.

In regards to claim 57, Schweich, Jr. et al. teaches the apparatus of claim 48. Schweich, Jr. et al. teaches in Figure 1 a connection to at least one of the patient's pharynx, the patient's oral cavity, the patient's tooth, a dental device, and a mount (14) exterior to the patient's mouth.

In regards to claim 66, Schweich, Jr. et al. teaches in Figure 1, the abstract and column 2, lines 56-59 a shaft (18) configured for insertion into a patient's tongue; a retractor member (20) connected at or near a first end of the shaft (18), and an anchor member (20) connected at or near a second end of the shaft (18), wherein at least one of the retractor member (20) or the anchor member (20) is configured to be positioned on an external surface of the tongue, neither the retractor member (20) nor the anchor member (20) configured to be tethered to bone, and at least one of the shaft (18), the retractor member (20) and the anchor member (20) able to prevent at least a portion of

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the tongue from collapsing toward a soft tissue located in the patient's oral cavity or pharynx.

In regards to claim 68, Schweich, Jr. et al. teaches in Figure 1, the abstract and column 2, lines 56-59 a shaft (18) sized for insertion into the soft tissue; a retractor member (20) connected at or near a first end of the shaft (18); and an anchor member (20) connected at or near a second end of the shaft (18), wherein the retractor member (20) and the anchor member (20) are configured to maintain a position on an external surface of the soft tissue, and the shaft (18), the retractor member (20) and the anchor member (20) interact to exert a pressure that prevents the deformation of the external surface of the soft tissue.

In regards to claim 69, Schweich, Jr. et al. teaches the apparatus of claim 68. Schweich, Jr. et al. teaches in Figure 1, the abstract and column 2, lines 56-59 that the counterforce pressure can prevent the external surface from falling toward the soft tissue.

In regards to claim 74, Schweich, Jr. et al. teaches in Figure 1, the abstract and column 2, lines 56-59 the device having a first end, a second end, and a shaft (18) disposed therebetween, the shaft (18) is adapted to be disposed through a soft tissue located in the patient's oral cavity or pharynx, with at least one of the first end and the second end able to be positioned on an external surface of the soft tissue with each of the first end and the second end contacting solely soft tissue, and with at least one of the first end, the second end, and the shaft (18) able to interact to exert a pressure that

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prevents deformation of at least a portion of the soft tissue to prevent obstruction in the patient's airway.

In regards to claim 75, Schweich, Jr. et al. teaches the apparatus of claim 74. Schweich, Jr. et al. teaches in Figure 1 that both the first and the second end are configured to be positioned on an external surface of the soft tissue.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 35, 37, 53, 56, 67 and 76-73 are rejected under 35 U.S.C.
 103(a) as being unpatentable over Schweich, Jr. et al. (US 5,961,440).

In regards to claim 35, Schweich, Jr. et al. teaches the apparatus of claim 32.

Schweich, Jr. et al. discloses the claimed invention except for the shaft being removable from the soft tissue. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the shaft removable from the soft tissue, since it has been held that the separation of elements, where removability would be desirable, is a design consideration within the skill of the art. *In re Dulberg*, 283 F. 2d 522, 129 USPO 348 (CCPA 1961).

In regards to claim 37, Schweich, Jr. et al. teaches the apparatus of claim 32. Schweich, Jr. et al. discloses the claimed invention except for at least one of the

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retractor member and the anchor member being disengagable from the shaft. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make at least one of the retractor member and the anchor member being disengagable from the shaft, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlicnrnam*, 168 USPQ 177, 179.

In regards to claim 53, Schweich, Jr. et al. teaches the apparatus of claim 48. Schweich, Jr. et al. discloses the claimed invention except for the shaft being removable from the patient' tongue. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the shaft removable from the patient's tongue, since it has been held that the separation of elements, where removability would be desirable, is a design consideration within the skill of the art. *In re Dulberg*, 283 F. 2d 522, 129 USPQ 348 (CCPA 1961).

In regards to claim 56, Schweich, Jr. et al. teaches the apparatus of claim 48. Schweich, Jr. et al. discloses the claim invention except for at least one of the retractor member and the anchor member being disengagable from the shaft. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make at least one of the retractor member and the anchor member being disengagable from the shaft, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlicnrnam*, 168 USPQ 177, 179.

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In regards to claim 67, Schweich, Jr. et al. teaches the apparatus of claim 66. Schweich, Jr. et al. discloses the claim invention except for the shaft being removable from the patient's tongue. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the shaft removable from the patient's tongue, since it has been held that the separation of elements, where removability would be desirable, is a design consideration within the skill of the art. *In re Dulberg*, 283 F. 2d 522, 129 USPQ 348 (CCPA 1961).

In regards to claim 76, Schweich, Jr. et al. teaches the apparatus of claim 32. Schweich, Jr. et al. does not teach that the tissue retractor is adjustable. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the tissue retractor adjustable, since it has been held that the provision of adjustability, where needed, involves routine skill in the art. *In re Stevens*, 101 USPQ 284 (CCPA 1954).

In regards to claim 77, Schweich, Jr. et al. teaches the apparatus of claim 32. Schweich, Jr. et al. does not teach that the anchor member is detachable from the shaft. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the anchor member being detachable from the shaft, since it has been held that the separation of elements, where removability would be desirable, is a design consideration within the skill of the art. In re Dulberg, 283 F. 2d 522, 129 USPQ 348 (CCPA 1961).

In regards to claim 78, Schweich, Jr. et al. teaches the apparatus of claim 48. Schweich, Jr. et al. does not teach that the tissue retractor is adjustable. However, it

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would have been obvious to one having ordinary skill in the art at the time the invention was made to make the tissue retractor adjustable, since it has been held that the provision of adjustability, where needed, involves routine skill in the art. *In re Stevens*, 101 USPQ 284 (CCPA 1954).

In regards to claim 79, Schweich, Jr. et al. teaches the apparatus of claim 48. Schweich, Jr. et al. does not teach that the anchor member is detachable from the shaft. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the anchor member being detachable from the shaft, since it has been held that the separation of elements, where removability would be desirable, is a design consideration within the skill of the art. In re Dulberg, 283 F. 2d 522, 129 USPQ 348 (CCPA 1961).

In regards to claim 80, Schweich, Jr. et al. teaches the apparatus of claim 66. Schweich, Jr. et al. does not teach that the tissue retractor is adjustable. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the tissue retractor adjustable, since it has been held that the provision of adjustability, where needed, involves routine skill in the art. *In re Stevens*, 101 USPQ 284 (CCPA 1954).

In regards to claim 81, Schweich, Jr. et al. teaches the apparatus of claim 66.

Schweich, Jr. et al. does not teach that the anchor member is detachable from the shaft.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the anchor member being detachable from the shaft, since it has been held that the separation of elements, where removability would be

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desirable, is a design consideration within the skill of the art. In re Dulberg, 283 F. 2d 522, 129 USPQ 348 (CCPA 1961).

In regards to claim 82, Schweich, Jr. et al. teaches the apparatus of claim 68. Schweich, Jr. et al. does not teach that the tissue retractor is adjustable. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the tissue retractor adjustable, since it has been held that the provision of adjustability, where needed, involves routine skill in the art. *In re Stevens*, 101 USPQ 284 (CCPA 1954).

In regards to claim 83, Schweich, Jr. et al. teaches the apparatus of claim 68. Schweich, Jr. et al. does not teach that the anchor member is detachable from the shaft. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the anchor member being detachable from the shaft, since it has been held that the separation of elements, where removability would be desirable, is a design consideration within the skill of the art. In re Dulberg, 283 F. 2d 522, 129 USPQ 348 (CCPA 1961).

 Claims 36, 38, 39 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schweich, Jr. et al. (US 5,961,440) in view of Boretos (US patent 4,254,774).

In regards to claim 36, Schweich, Jr. et al. teaches the apparatus of claim 32. Schweich, Jr. et al. does not teach that at least one of the retractor member, the shaft, and the anchor member comprises an inflatable tube. However, Boretos teaches in

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column 3, lines 21-27 and column 4, lines 34-35 an analogous device in which at least one of the retractor member, the shaft, and the anchor member comprises an inflatable tube (12). It would have been obvious to one having ordinary skill in the art at the time of invention to modify the retractor member, the shaft or the anchor taught by Schweich, Jr. et al. with the inflatable tube taught by Boretos because this element is known to facilitate insertion and placement, as Boretos teaches in column 3, lines 21-27.

In regards to claim 38, Schweich, Jr. et al. teaches the apparatus of claim 32. Schweich, Jr. et al. does not teach that the shaft comprises an internal passageway for adding fluid. However, Boretos teaches in column 6, lines 30-33 an analogous device in which the shaft (11) comprises an internal passageway for adding fluid (gas). It would have been obvious to one having ordinary skill in the art at the time of invention to modify the shaft taught by Schweich, Jr. et al. as modified by Boretos with the internal passageway for adding fluid taught by Boretos because this element is known to provide for a change in shape of the shaft taught by Schweich, Jr. et al., as Boretos teaches in column 5, lines 64-67.

In regards to claim 39, Schweich, Jr. et al. and Boretos teach the apparatus of claims 32 and 38. Schweich, Jr. et al. does not teach that the shaft comprises a regulator for said fluid. However, Boretos teaches in column 5, lines 64-67 and column 4, lines 30-33 an analogous device in which the shaft (11) comprises a regulator (21) for said fluid gas. It would have been obvious to one having ordinary skill in the art at the time of invention to modify the shaft taught by Schweich, Jr. et al. as modified by

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Boretos with the regulator taught by Boretos because this element is known to control the change in shape and size produced by the influx of fluid into the shaft.

In regards to claim 54, Schweich, Jr. et al. teaches the apparatus of claim 48. Schweich, Jr. et al. does not teach that at least one of the retractor member, the shaft, and the anchor member comprises an inflatable tube, or that the shaft comprises an internal passageway for adding a fluid. However, Boretos teaches in column 6, lines 30-33 an analogous device in which the shaft (11) comprises an internal passageway for adding a fluid (gas). It would have been obvious to one having ordinary skill in the art at the time of invention to modify the shaft taught by Schweich, Jr. et al. with the internal passageway for adding a fluid taught by Boretos because this element is known to provide for a change in shape of the shaft taught by Schweich, Jr. et al., as Boretos teaches in column 5. lines 64-67.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection. A new ground(s) of rejection has been made in view of Schweich, Jr. et al. (US 5,961,440).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VICTORIA HICKS whose telephone number is Art Unit: 3772

(571)270-7033. The examiner can normally be reached on Monday through Thursday,

7:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Bianco can be reached on (571) 272-4940. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/V. H./

Examiner, Art Unit 3772

3/24/11

/Patricia Bianco/

Supervisory Patent Examiner, Art Unit 3772